

Ms. Brenda Hentrup  
Mi Lin Wood Products Corporation  
Box 269 State Hwy 56 East  
Paoli, Indiana 47454

Dear Ms. Hentrup:

Re: Exempt Construction and Operation Status,  
**E 117-11650-00023**

The application from Mi Lin Wood Products Corporation received on December 13, 1999, has been reviewed. Based on the data submitted and the provisions in Sections 1 and 2 of 326 IAC 2-1.1, it has been determined that the following surface coating operation, to be located at State Highway 56 East, Poali, Indiana, is classified as exempt from air pollution permit requirements:

One single-station differential coating operation consisting of one (1) model RCD-48 single-station differential roll coater with a 56" x 9" face length rubber covered applicator roll, one (1) 17' conveyor, two (2) conveyor mount UV irradiators, one (1) UV motor control center.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

This exemption is the first air approval issued to this source.

Any change or modification which may increase the potential PM emissions to five (5) tons per year or more, the potential SO<sub>2</sub>, NO<sub>x</sub>, and VOC emissions to ten (10) tons per year or more, or the CO emission to twenty-five (25) tons per year or more from the equipment covered in this exemption must be approved by the Office of Air Management (OAM) before such change may occur.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

rlm

cc: File - Orange County  
Orange County Health Department  
Air Compliance - Gene Kelso  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

# Indiana Department of Environmental Management Office of Air Management

## Technical Support Document (TSD) for an Exemption

### Source Background and Description

**Source Name:** Mi Lin Wood Products Corporation  
**Source Location:** State Hwy 56 East, Paoli, Indiana 47454  
**County:** Orange  
**SIC Code:** 2499  
**Exemption No.:** S117-11650-00023  
**Permit Reviewer:** Rachel Meredith

The Office of Air Management (OAM) has reviewed an application for an exemption to install and operate a single-station roller coating operation. The facility description for the new surface coating operation is as follows:

One single-station differential coating operation consisting of one (1) model RCD-48 single-station differential roll coater with a 56" x 9" face length rubber covered applicator roll, one (1) 17' conveyor, two (2) conveyor mount UV irradiators, one (1) UV motor control center.

### Existing Approvals

This is the first air approval issued to this source.

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the Exemption be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete application for the purposes of this review was received on December 17, 1999.

### County Attainment Status

The source is located in Orange County.

Pollutant	Status
PM	Attainment
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>x</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Orange County has been designated as attainment or unclassifiable for ozone.

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential Emissions (tons/year)
PM	0.0
PM-10	0.0
SO <sub>2</sub>	0.0
VOC	0.02
CO	0.0
NO <sub>x</sub>	0.0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Total HAPs	0.0

See Appendix A for detailed emissions calculations.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS), 40 CFR 60, applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, applicable to this source.

### State Rule Applicability

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not one of the twenty eight (28) listed sources under 326 IAC 2-2-1(p)(1) and the potential to emit from the new surface coating operation is below the threshold established in 326 IAC 2-2-1(p)(2). Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21 will not apply.

#### 326 IAC 5-1 (Visible Emission Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:

- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
- (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

326 IAC 8-2 Wood Furniture and Cabinet Coating)

Potential VOC emissions from the surface coating operation are less than 15 pounds per day.  
Therefore the requirements of 326 IAC 8-2 will not apply.

**Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

**Conclusion**

The construction of the surface coating operation shall be subject to the conditions of the attached proposed **Exemption No. 117-11650-00023**.

**Appendix A: Emissions Calculations for VOC Emissions  
(Surface Coating)**

**Company Name: Mi Lin Wood Products Corporation**

**Plant Location: State Hwy. 56 East, Paoli, Indiana**

**County: Orange**

**Exemption No.: 117-11650-00023**

**Permit Reviewer: Rachel Meredith**

Material (AS APPLIED)	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency
<b>Single Station Differential Coater</b>																
<b>437-1160</b>	10.07	1.12%	0.00%	1.12%	0.00%	98.71%	0.033	1.00	0.11	0.11	0.00	0.09	0.02	0.00	0.11	100%
<b>Total Potential Emissions (tons/yr)</b>											<b>0.00</b>	<b>0.09</b>	<b>0.02</b>	<b>0.00</b>		
<b>METHODOLOGY</b> Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1 - Volume % water) Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics) Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * (24 hrs/ 1 day) Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * (# of hours/yr) * (1 ton/2000 lbs) (# of hours = 8760 for state potential 7948 for controlled) Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1 - Weight % Volatiles) * (1 - Transfer efficiency) * (# of hours/yr) * (1 ton/ 2000 lbs) Pounds VOC per Gallon of Solids = (lbs/gal) * (weight % organics) / (Volume % solids)/Transfer Efficiency																

**Applicability of 326 IAC 8-2-9:**

Potential VOC emissions from coating is less than 15 pounds per day. Pursuant to 326 IAC 8-2-1 (Applicability), the requirements of 326 IAC 8-2-9 and other article 8 rules do not apply.

**Appendix A: Emissions Calculations for VOC Emissions  
(Surface Coating)**

**Company Name: Mi Lin Wood Products Corporation**

**Plant Location: State Hwy. 56 East, Paoli, Indiana**

**County: Orange**

**Exemption No.: 117-11650-00023**

**Permit Reviewer: Rachel Meredith**

Material (AS APPLIED)	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency
<b>Single Station Differential Coater</b>																
<b>437-1160</b>	10.07	1.12%	0.00%	1.12%	0.00%	98.71%	0.033	1.00	0.11	0.11	0.00	0.09	0.02	0.00	0.11	100%
<b>Total Potential Emissions (tons/yr)</b>											<b>0.00</b>	<b>0.09</b>	<b>0.02</b>	<b>0.00</b>		
<b>METHODOLOGY</b> Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1 - Volume % water) Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics) Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * (24 hrs/ 1 day) Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * (# of hours/yr) * (1 ton/2000 lbs) (# of hours = 8760 for state potential 7948 for controlled) Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1 - Weight % Volatiles) * (1 - Transfer efficiency) * (# of hours/yr) * (1 ton/ 2000 lbs) Pounds VOC per Gallon of Solids = (lbs/gal) * (weight % organics) / (Volume % solids)/Transfer Efficiency																

**Applicability of 326 IAC 8-2-9:**

Potential VOC emissions from coating is less than 15 pounds per day. Pursuant to 326 IAC 8-2-1 (Applicability), the requirements of 326 IAC 8-2-9 and other article 8 rules do not apply.